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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	10/602,847	HE ET AL.
	Examiner	Art Unit	
	JEREMY DUFFIELD	2623	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS,
WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>07 July 2008</u>.

2a)☒ This action is **FINAL.**   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-74</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-74</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

       1.☐ Certified copies of the priority documents have been received.

       2.☐ Certified copies of the priority documents have been received in Application No. _____.

       3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

Response to Arguments

1.   Applicant's arguments filed 07 July 2008 have been fully considered but they are

not persuasive.

In regard to applicant's arguments that the given reference does not clearly teach

"requesting media content...at the accelerated rate", Para. 21 and similar

arguments in Para. 35, 43, 49, the examiner respectfully disagrees. Porter

teaches using a multi-stream approach to fast-forwarding and rewinding.

Multiple copies of a video are recorded at various frame rates. When a user

requests a fast-forward option, the video with the requested frame rate is

transmitted and played for the user at the accelerated rate (Col. 21, lines 9-19).

The result is an uninterrupted video stream that is presented to the user at an

accelerated rate without dropping any data intentionally. The video is recorded

at the accelerated frame rate and therefore, is transmitted and played at the

accelerated frame rate. Examiner notes a distinction between an accelerated

frame rate and an accelerated bit rate or other accelerated transmission rate,

such as for burst transmissions. However, the claims as presented are broad

enough to encompass the accelerated frame rate as disclosed in Porter.

In regard to applicant's arguments that the given reference does not clearly teach

"wherein the media…the audio stream", Para. 53, the examiner respectfully

disagrees. Porter teaches the prefix data is separate data that is constructed

and inserted to smoothly transition between the current location in the MPEG file and a new location (Col. 13, lines 45-51; Fig. 4b). The prefix data is used in association with the tag file, which contains time stamps, frame numbers, etc. in order to synchronize the media stream while using variable playback speeds (Col. 7, lines 53-64).

In regard to applicant's arguments that the given reference does not clearly teach "'script commands', 'metadata', or 'captions'", Para. 55, the examiner respectfully disagrees. Porter describes prefix data and a tag file that contains time stamps, frame numbers, etc. (Col. 7, lines 53-64; Col. 13, lines 45-51; Table 5). Examiner equates the prefix data and tag file information to metadata.

In regard to applicant's arguments that the given references do not clearly teach "receiving previously stored, non-live media content via a media stream", Para. 59, the examiner respectfully disagrees. Porter teaches the cited limitation in multiple locations. Major teaches disabling the variable play speeds when the content is live content. It has been noted that a source delivering live content can not be used with various variable play speed controls, including fast-forward. This also means that Major teaches the process of disabling the variable speed controls when the source is unable to deliver content at an accelerated rate. Used in combination with Porter, a system which transmits a stored, non-live media content will disable the variable play speed controls when the source is

unable to deliver the content at an accelerated rate would have been realized by

one of ordinary skill in the art at the time the invention was made.

Claim Rejections - 35 USC § 102

2.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3.   Claims 1, 5-8, 45, 47, 67, and 69 are rejected under 35 U.S.C. 102(b) as being

anticipated by Porter (US 5,659,539).

Regarding claim 1, Porter teaches a processor-readable medium

comprising processor-executable instructions; Note: a client that requests,

processes, and plays media content inherently has a processor-readable

medium comprising processor-executable instructions (Col. 5, line 65-Col. 6, line

34; Col. 16, lines 59-67); configured for:

requesting media content at an accelerated rate from a source, the

accelerated rate being a rate that exceeds a normal playback rate, i.e. client

transmits a fast forward request to receive media content from the mass storage

device (Col. 5, line 65-Col. 6, line 14; Col. 16, lines 59-67);

receiving a media stream at the accelerated rate (Col. 6, lines 29-34; Col.

18, lines 55-62), wherein the media stream is an uninterrupted data stream of the

media content that has no intentionally dropped data, i.e. the fast forward copy of the video is played (Col. 21, lines 8-19); and

rendering all content in the media stream at the accelerated rate, i.e. fast forwarded video is played on the associated television (Col. 5, lines 35-46; Col. 21, lines 8-19).

Regarding claim 5, Porter further teaches receiving a degraded media stream at a reduced rate, i.e. receiving a media stream with a lesser fast forwarding rate than the accelerated fast forwarding rate, (Col. 16, lines 40-51), and drops video frames (Col. 17, lines 9-63), wherein the degraded media stream includes a subset of data from the media stream (Col. 17, lines 9-63); and

rendering the degraded media stream at the reduced rate (Col. 21, lines 8-19).

Regarding claim 6, Porter further teaches the degraded media stream comprises a video stream that has dropped video frames (Col. 17, lines 9-63) and wherein an audio stream of the media stream has been dropped (Col. 20, lines 1-7).

Regarding claim 7, Porter further teaches the source is a streaming media server, i.e. stream server (Fig. 1b, el. 110).

Regarding claim 8, Porter further teaches a computer comprising the processor-readable medium, i.e. a client which is a set-top converter box (Fig. 1b, el. 160, 170, 180; Col. 5, lines 36-47).

Regarding claim 45, claim is analyzed with respect to the combination of claims 1 and 8.

Regarding claim 47, claim is analyzed with respect to claim 5.

Regarding claim 67, Porter teaches a streaming media server, i.e. stream server (Fig. 1b, el. 110), comprising a variable speed streaming module configured to receive a request to stream media content at an accelerated rate, (Col. 16, line 60-Col. 17, line 7; Col. 24, lines 21-35), and

to stream the media content at the accelerated rate without dropping any data from the media content, the accelerated rate being a rate that exceeds a real time playback rate of the media content, i.e. the fast forward copy of the video is played (Col. 21, lines 8-19).

4.   Claims 30, 33, 64, and 69 are rejected under 35 U.S.C. 102(a) as being anticipated by Ishikawa (US 2003/0093803).

Regarding claim 30, Ishikawa teaches streaming a media stream to a client at a real time rate (Para. 5);

receiving a request from the client to deliver the media stream at an
accelerated rate, i.e. fast-forward (Para. 5, 58); and

delivering the media stream to the client at the accelerated rate, wherein
no data is intentionally dropped from the media stream to achieve the
accelerated rate (Para. 5, 58-59).

Regarding claim 33, Ishikawa teaches a streaming media server
comprising the processor-readable medium, i.e. VOD server (Fig. 1, el. 10; Fig.
3, el. 110, Fig. 4, el. 200; Fig. 5, el. 300).

Regarding claim 64, claim is analyzed with respect to the combination of
claims 30 and 33.

Regarding claim 69, claim is analyzed with respect to claim 30. Ishikawa
further teaches rendering a stream of media at a real-time playback rate (Para.
5).

Claim Rejections - 35 USC § 103

5.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set
forth in section 102 of this title, if the differences between the subject matter sought to be patented and
the prior art are such that the subject matter as a whole would have been obvious at the time the
invention was made to a person having ordinary skill in the art to which said subject matter pertains.
Patentability shall not be negatived by the manner in which the invention was made.

6.   Claims 2-4, 46, and 70-71 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Porter in view of Wing So (US 5,987,590) in view of Bhadkamkar (US

5,893,062).

Regarding claim 2, Porter teaches all elements of claim 1.

Porter further teaches the media stream comprises a video stream and an

audio stream, i.e. a stream of audio-visual data (Col. 5, lines 36-47), and the

rendering further comprising:

processing the video stream and the audio stream at the accelerated rate

(Col. 5, lines 36-47; Col. 21, lines 8-19).

Porter does not clearly teach the rendering further comprising:

processing the video stream and the audio stream through a playback

filter graph at the accelerated rate; and

implementing a pitch adjustment algorithm within the playback filter graph

to process the audio stream.

Wing So teaches an MPEG playback filter graph in a computer system

(Fig. 10; Col. 13, lines 50-58).

Therefore, it would have been obvious to one of ordinary skill in the art at

the time the invention was made to modify Porter's renderer to process video

stream data through a playback filter graph, as taught by Wing So, at an

accelerated rate for the purpose of filtering out unwanted data.

Porter in view of Wing So does not clearly teach processing the audio

stream through the playback filter graph at the accelerated rate; and

implementing a pitch adjustment algorithm within the playback filter graph to process the audio stream.

Bhadkamkar teaches processing the audio stream at an accelerated rate (Col. 12, lines 25-55); and implementing a pitch adjustment algorithm to process the audio stream (Fig. 3a, 3b; Col. 12, lines 25-55).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Porter's renderer to process audio stream data using the pitch adjustment method, as taught by Bhadkamkar, within the playback filter graph, as taught by Wing So, for the purpose of decreasing the pitch during fast-forwarding.

Regarding claim 3, Porter in view of Wing So and further in view of Bhadkamkar teaches a non-video/non-audio data stream synchronized to the video stream and the audio stream, i.e. prefix data sent to transition between a current location in the MPEG file and a new location (Porter-Col. 12, lines 32-48; Col. 13, lines 45-51),

the rendering further comprising processing the non-video/non-audio data stream at synchronized locations within the video stream and the audio stream (Porter-Col. 12, lines 32-48; Col. 13, lines 45-51).

Regarding claim 4, Porter in view of Wing So and further in view of
Bhadkamkar teaches the non-video/non-audio data stream includes metadata,
i.e. prefix data (Porter-Col. 12, lines 32-48; Col. 13, lines 45-51).

Regarding claim 46, claim is analyzed with respect to claim 2.

Regarding claim 70, claim is analyzed with respect to claim 2.

Regarding claim 71, claim is analyzed with respect to claim 3.

7.   Claims 9-18, 20-29, 34-36, 39, 48-63, 68, and 72-74 are rejected under 35
U.S.C. 103(a) as being unpatentable over Porter in view of Major (US 6,990,512).

Regarding claim 9, Porter teaches a processor-readable medium
comprising processor-executable instructions; Note: a client that requests,
processes, and plays media content inherently has a processor-readable
medium comprising processor-executable instructions (Col. 5, line 65-Col. 6, line
34; Col. 16, lines 59-67); configured for:

receiving a previously stored, non-live media content via a media stream,
i.e. receiving audio-visual data from a mass storage device (Col. 5, lines 35-47;
Col. 6, lines 29-34);

determining a source of the media stream (Col. 6, lines 29-34);

a stream server determines if the source can deliver the media stream at an accelerated rate, i.e. determining if the server has a prerecorded file at the accelerated rate (Col. 21, lines 8-24), and determining if the media will exceed the available bandwidth (Col. 17, lines 19-63).

Porter does not clearly teach enabling and disabling variable play speed controls depending on the source and on whether the source can deliver the media stream at the accelerated rate.

Major teaches determining a source of the media stream, i.e. based on location information from the media player (Col. 3, lines 26-50);

determining if the source can deliver the media stream at an accelerated rate, i.e. whether the media is for a live time session, which can not be provided at an accelerated rate (Col. 1, lines 33-55; Col. 3, lines 26-50).

enabling and disabling variable play speed controls depending on the source and on whether the source can deliver the media stream at the accelerated rate, i.e. disabling when the source can not deliver at an accelerated rate (Col. 1, lines 33-55).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Porter's system to enable and disable the variable speed controls, as taught by Major, depending on the source and on whether the source can deliver the media stream at an accelerated rate would have constituted the mere arrangement of old elements with each performing the same function it had been known to perform, the combination yielding no more

than one would expect from such an arrangement and for the purpose of providing a jitter-free movie with fast-forward and rewind.

Regarding claim 10, Porter in view of Major teaches the enabling and disabling comprises enabling the variable play speed controls such that play speeds cannot exceed a maximum accelerated rate at which the source can deliver the media stream without intentionally dropping portions of the media content (Porter-Col. 16, lines 51-60; Col. 17, lines 1-6; Col. 21, lines 9-30; Major-Col. 1, lines 33-55), Note: a user can use play speed controls for any of the stored varying frame rate files which do not drop data when transmitted.

Regarding claim 11, Porter in view of Major teaches the determining if the source can deliver the media stream at an accelerated rate comprises determining an average data delivery rate from the source, i.e. determining if the media will exceed the available bandwidth (Porter-Col. 17, lines 19-63).

Regarding claim 12, Porter in view of Major (Col. 1, lines 33-55) teaches the enabling and disabling comprises enabling the variable play speed controls if the source is a streaming media server capable of delivering the media stream at the accelerated rate, NOTE: Porter teaches any speed of fast forward can be provided by the frame selection process (Porter-Col. 16, lines 51-60; Col. 17, lines 1-6; Col. 21, lines 9-30).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Porter's system to enable the variable speed controls, as taught by Major, if the source is a streaming media server capable of delivering the media stream at the accelerated rate for the purpose of providing a jitter-free movie with nearly unlimited speeds of fast-forward and rewind.

Regarding claim 13, Porter in view of Major teaches disabling variable play speed controls in an accelerated playback range if the source is a streaming media server that is not capable of delivering the media stream at the accelerated rate, i.e. a prerecorded file at the accelerated rate is not available (Porter-Col. 21, lines 8-24) or the media is a live presentation (Major-Col. 1, lines 33-55); and

enabling variable play speed controls in a decelerated playback range, i.e. slow motion playback is available (Porter-Col. 20, lines 50-64).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Porter's system to disable the variable speed controls in an accelerated playback range, as taught by Major, if the source is a streaming media server that is not capable of delivering the media stream at the accelerated rate, and enabling variable play speed controls, as taught by Major, in a decelerated playback range for the purpose of providing a jitter-free movie with nearly unlimited speeds of fast-forward and rewind.

Regarding claim 14, Porter in view of Major teaches disabling the variable play speed controls if the source is delivering live media streams and enabling the variable speed controls if the media stream is stored media streaming (Major-Col. 1, lines 1-55). Major also teaches an internet cache system for use between a media server, i.e. Web server, and the client (Major-Col. 2, lines 1-10).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Porter's system to use the technique of disabling variable speed controls, as taught by Major, so to disable the variable speed controls if the source is a Web server delivering the media stream as a progressively downloaded file, as taught by Major, for the purpose of providing a jitter-free movie with nearly unlimited speeds of fast-forward and rewind.

Regarding claim 15, Porter in view of Major teaches enabling the variable play speed controls after the media stream is completely downloaded from the Web server, i.e. variable speed controls are enabled for stored media streaming (Major- Col. 1, lines 1-55).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Porter's system to enable the variable play speed controls after the media stream is completely downloaded from the

Web server, as taught by Major, for the purpose of providing a jitter-free movie with nearly unlimited speeds of fast-forward and rewind.

Regarding claim 16, Porter in view of Major teaches enabling the variable play speed controls if the source is a local media source, i.e. mass storage device (Porter-Col. 6, lines 1-11; Fig. 1b, el. 140).

Regarding claim 17, Porter in view of Major teaches playing back the media stream at the accelerated rate, wherein the playing back includes rendering all content within the media stream, i.e. playing the fast-forward copy of the media file (Porter-Col. 21, lines 8-24).

Regarding claim 18, Porter in view of Major teaches the enabling and the disabling comprise altering graphical representations of the variable play speed controls on a graphical user interface, i.e. disabling play controls on the media player control panel (Major-Col. 6, lines 15-45).

Regarding claim 20, Porter in view of Major teaches the source is a local media, i.e. for stored media streaming (Major-Col. 1, lines 34-44), streaming media server (Porter-Col. 5, lines 36-67), or a Web server, i.e. for live broadcasting using the Internet Cache System (Major-Col. 1, lines 45-55; Col. 2, lines 1-18).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Porter's system to have a local media or a Web server as a source for the purpose of providing a jitter-free movie with nearly unlimited speeds of fast-forward and rewind.

Regarding claim 21, Porter in view of Major teaches the media stream is audio data (Porter-Col. 5, lines 36-47), video data (Porter-Col. 5, lines 36-47), or metadata, i.e. tag file (Porter-Col. 7, lines 25-64).

Regarding claim 22, Porter in view of Major teaches a computer comprising the processor-readable medium, i.e. a client which is a set-top converter box (Fig. 1b, el. 160, 170, 180; Col. 5, lines 36-47).

Regarding claim 23, Porter teaches a processor-readable medium comprising processor-executable instructions; Note: a client that requests, processes, and plays media content inherently has a processor-readable medium comprising processor-executable instructions (Col. 5, line 65-Col. 6, line 34; Col. 16, lines 59-67); configured for:

sending a request to a media source to stream media content from a media file at a non-real-time rate, i.e. client transmits a fast forward request to receive media content from the mass storage device (Col. 5, line 65-Col. 6, line 14; Col. 16, lines 59-67);

a stream server determines if the source can deliver the media stream at
an accelerated rate, i.e. determining if the server has a prerecorded file at the
accelerated rate (Col. 21, lines 8-24), and determining if the media will exceed
the available bandwidth (Col. 17, lines 19-63);

receiving and playing back the media content at the non-real-time rate, i.e.
playing a fast-forward version of a media file (Col. 21, lines 8-24).

Porter does not clearly teach determining if the media source and a
network link can support the non-real-time rate without intentionally dropping
data from the media content.

Major teaches determining if the media source and a network link can
support the non-real-time rate, i.e. whether the media is for a live time session,
which can not be provided at an accelerated rate (Col. 1, lines 33-55; Col. 3,
lines 26-50).

Therefore, it would have been obvious to one of ordinary skill in the art at
the time the invention was made to modify Porter's clients to determine if the
media source and a network link can support a non-real-time rate, as taught by
Major, for the purpose of providing a jitter-free movie with nearly unlimited
speeds of fast-forward and rewind.

Regarding claim 24, Porter in view of Major teaches a non-real-time rate is
a rate selected from the group comprising: an accelerated rate (Porter-Col. 7,

lines 53-60; Col. 16, lines 40-59); and a decelerated (Porter-Col. 7, lines 53-60; Col. 16, lines 40-59).

Regarding claim 25, Porter in view of Major teaches the non-real-time rate is the accelerated rate, (Porter-Col. 21, lines 8-24), the processor-readable medium comprising further processor-executable instructions configured for:

determining that the media source and/or the network link cannot support the accelerated rate without intentionally dropping data from the media content, i.e. a prerecorded file at the accelerated rate is not available as determined by the stream server (Porter-Col. 21, lines 8-24), and whether the media is for a live time session, which can not be provided at an accelerated rate (Major-Col. 1, lines 33-55; Col. 3, lines 26-50); and

sending a request to the media source to drop data from the media content and to stream remaining media content from the media file, i.e. if requested rate is not available, then frame selection is performed (Porter-Col. 21, lines 8-24).

Regarding claim 26, Porter in view of Major teaches the remaining media content is streamed from the media source within a period of time equal to a period of time that would be needed to stream all the media content from the media source at the accelerated rate, i.e. frame selection is performed on the

media file until it can be presented at the requested rate (Porter-Col. 21, lines 8-24).

Regarding claim 27, Porter in view of Major teaches data dropped from the media content is selected from the group comprising: an audio data stream (Porter-Col. 20, lines 1-12); video frames from a video data stream (Porter-Col. 21, lines 8-24).

Regarding claim 28, Porter in view of Major teaches determining that the media source and/or the network link cannot support the accelerated rate without intentionally dropping data from the media content (Porter-Col. 21, lines 8-24; Major-Col. 1, lines 33-55; Col. 3, lines 26-50); and

In response to determining that the media source and/or the network link cannot support the accelerated rate without intentionally dropping data from the media content, sending a request to the media source to stream the media content stream from the media file at a normal real-time rate, i.e. playing the media file (Major-Col. 1, lines 33-55).

Regarding claim 29, Porter in view of Major teaches a computer comprising the processor-readable medium, i.e. a client which is a set-top converter box (Porter-Fig. 1b, el. 160, 170, 180; Col. 5, lines 36-47).

Regarding claim 34, claim is analyzed with respect to the combination of claims 9 and 10. Note: Examiner equates Porter's client (Fig. 1b, el. 160, 170, 180) to a media player.

Regarding claim 35, claim is analyzed with respect to the combination of claims 9 and 10.

Regarding claim 36, Porter teaches all elements of claim 34.

Porter does not clearly teach a graphical user interface (GUI) module configured to support a GUI that presents the variable play speed controls to a user and enables the user to activate the variable play speed controls.

Major teaches a graphical user interface (GUI) module configured to support a GUI that presents the variable play speed controls to a user and enables the user to activate the variable play speed controls, i.e. user interface with speed control features (Col. 1, lines 33-55).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Porter's clients to include a graphical user interface (GUI) module configured to support a GUI that presents the variable play speed controls to a user and enables the user to activate the variable play speed controls, as taught by Major, for the purpose of providing a jitter-free movie with nearly unlimited speeds of fast-forward and rewind.

Regarding claim 39, Porter teaches a computer comprising the media player, i.e. client (Fig. 1, el. 160, 170, 180).

Regarding claim 48, claim is analyzed with respect to the combination of claims 9, 10, and 22.

Regarding claim 49, claim is analyzed with respect to claim 10.

Regarding claim 50, claim is analyzed with respect to claim 11.

Regarding claim 51, claim is analyzed with respect to claim 12.

Regarding claim 52, claim is analyzed with respect to claim 13.

Regarding claim 53, claim is analyzed with respect to claim 14.

Regarding claim 54, claim is analyzed with respect to claim 15.

Regarding claim 55, claim is analyzed with respect to claim 16.

Regarding claim 56, claim is analyzed with respect to claim 17.

Regarding claim 57, claim is analyzed with respect to claim 18.

Regarding claim 58, claim is analyzed with respect to claim 19.

Regarding claim 59, claim is analyzed with respect to claim 23.

Regarding claim 60, claim is analyzed with respect to claim 24.

Regarding claim 61, claim is analyzed with respect to claim 25.

Regarding claim 62, claim is analyzed with respect to claim 27.

Regarding claim 63, claim is analyzed with respect to claim 28.

Regarding claim 68, Porter teaches all elements of claim 67.

Porter does not clearly teach the variable speed streaming module is further configured to control variable play speed controls of a media player executing on a client computer.

Major teaches enabling and disabling of the variable play speed controls of a media player executing on a client computer (Col. 3, line 65-Col. 4, line 2).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Porter's streaming server to control

variable play speed controls of a media player executing on a client computer, as

taught by Major, for the purpose of providing a jitter-free movie with nearly

unlimited speeds of fast-forward and rewind.

Regarding claim 72, claim is analyzed with respect to the combination of

claims 9 and 10.

Regarding claim 73, claim is analyzed with respect to the combination of

claims 12 and 13.

Regarding claim 74, claim is analyzed with respect to the combination of

claims 14 and 15.

8.   Claims 19, 38, 40-42, and 44 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Porter in view of Major and further in view of Yeo (US 6,711,741).

Regarding claim 19, Porter in view of Major teaches all elements of claim

9.

Porter in view of Major further teaches the variable play speed controls

include:

a play speed control configured to vary a playback rate of the media

stream between a rate that is less than a real time rate and a rate that is greater

than the real time rate, i.e. any speed of forward and rewind is provided by

holding down the fast-forward/rewind button (Porter-Col. 16, lines 40-51; Col. 24, lines 21-59);

a fast forward control configured to increase the playback rate of the media stream to a rate that exceeds the real time rate (Porter-Col. 16, lines 40-51; Col. 24, lines 21-59);

a rewind control configured to decrease the playback rate of the media stream to a negative rate (Porter-Col. 16, lines 40-51; Col. 24, lines 21-59);

a seek control configured to access a particular playback location within the media stream (Porter-Col. 3, lines 55-59; Col. 11, line 54-Col. 12, line 11);

Porter in view of Major does not clearly teach a next frame control configured to step the playback rate of the media stream forward one video frame at a time; and a previous frame control configured to step the playback rate of the media stream backward one video frame at a time.

Yeo teaches a next frame control configured to step the playback rate of the media stream forward one video frame at a time (Col. 5, lines 1-8); and

a previous frame control configured to step the playback rate of the media stream backward one video frame at a time (Col. 5, lines 1-8).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Porter in view of Major to include a next frame control and a previous frame control, as taught by Yeo, for the purpose of human analysis of each video frame.

Regarding claim 38, claim is analyzed with respect to claim 19.

Regarding claim 40, claim is analyzed with respect to the combination of claims 9 and 19.

Regarding claim 41, claim is analyzed with respect to the combination of claims 9 and 19.

Regarding claim 42, claim is analyzed with respect to claim 36.

Regarding claim 44, claim is analyzed with respect to claim 39.

9.   Claims 31 and 65 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ishikawa in view of Major.

Regarding claim 31, Ishikawa teaches all elements of claim 30.

Ishikawa does not clearly teach determining that a network link cannot support the accelerated rate without dropping data from the media stream; and delivering the media stream to the client at a reduced rate that is less than the accelerated rate without dropping data from the media stream.

Major teaches determining that a network link cannot support the accelerated rate without dropping data from the media stream (Col. 1, lines 33-55; Col. 3, lines 26-50); and

delivering the media stream to the client at a reduced rate that is less than the accelerated rate without dropping data from the media stream, i.e. playing the video normally (Col. 1, lines 33-55; Col. 3, lines 26-50).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Ishikawa to include determining that a network link cannot support the accelerated rate without dropping data from the media stream; and delivering the media stream to the client at a reduced rate that is less than the accelerated rate without dropping data from the media stream, as taught by Major, for the purpose of providing a continuous stream of media with fast-forwarding capabilities, when available, to the user.

Regarding claim 65, claim is analyzed with respect to claim 31.

10.   Claims 32 and 66 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ishikawa in view of Porter.

Regarding claim 32, Ishikawa teaches all elements of claim 30.

Ishikawa does not clearly teach determining that a network link cannot support the accelerated rate; and delivering the media stream to the client at a reduced rate that is less than the accelerated rate; and while delivering the media stream to the client at the reduced rate, dropping data from the media stream.

Porter teaches determining that a network link cannot support the accelerated rate, i.e. determining if the media will exceed the available bandwidth (Col. 17, lines 19-63; Col. 21, lines 9-30); and

delivering the media stream to the client at a reduced rate that is less than the accelerated rate (Col. 16, lines 40-60); and

while delivering the media stream to the client at the reduced rate, dropping data from the media stream (Col. 16, line 65-Col. 17, line 7).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Ishikawa to include determining that a network link cannot support the accelerated rate; and delivering the media stream to the client at a reduced rate that is less than the accelerated rate; and while delivering the media stream to the client at the reduced rate, dropping data from the media stream, as taught by Porter, for the purpose of providing a continuous stream of media with fast-forwarding capabilities, when available, to the user.

Regarding claim 66, claim is analyzed with respect to claim 32.

11.   Claim 37 is rejected under 35 U.S.C. 103(a) as being unpatentable over Porter in view of Major and further in view of Belknap (US 5,586,264).

Regarding claim 37, Porter teaches all elements of claim 34.

Porter in view of Major does not clearly teach an application programming interface configured to expose the variable play speed controls to programmatic control of a custom application program.

Belknap teaches an application programming interface located in a client receiver (Fig. 7; Col. 18, lines 44-54).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Porter's clients to include an application programming interface, as taught by Belknap, configured to expose the variable play speed controls to programmatic control of a custom application program for the purpose of providing an easy-to-use user interface for the subscriber.

12. Claim 43 is rejected under 35 U.S.C. 103(a) as being unpatentable over Porter in view of Major in view of Yeo and further in view of Belknap.

Regarding claim 43, claim is analyzed with respect to claim 37.

Conclusion

13. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the
shortened statutory period will expire on the date the advisory action is mailed, and any
extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of
the advisory action. In no event, however, will the statutory period for reply expire later
than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the
examiner should be directed to JEREMY DUFFIELD whose telephone number is
(571)270-1643. The examiner can normally be reached on Mon.-Thurs. 8:00 A.M.-5:30
P.M. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's
supervisor, Scott Beliveau can be reached on (571) 272-7343. The fax phone number
for the organization where this application or proceeding is assigned is 571-273-8300.

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22 September 2008
JSD

/Scott Beliveau/
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